

AMENDMENTS TO THE CLAIMS

This claim listing replaces all prior versions, and listings, of the claims in the application:

1-5. Cancelled

6. (Currently Amended) An isolated nucleic acid molecule encoding an isolated PMSA derived peptide, the nucleic acid being selected from the group consisting of: SEQ ID NO.:12, SEQ ID NO. 14, SEQ ID NO.:15, SEQ ID NO.:16, and SEQ ID NO.:17.

~~(a) a nucleic acid as shown in any one of SEQ ID NOS:12-17 wherein T can also be U;~~

~~(b) a nucleic acid sequence that is complementary to a nucleic acid sequence of (a); and,~~

~~(c) a nucleic acid sequence that hybridizes to a nucleic acid sequence of (a), or (b) under stringent hybridization conditions.~~

7. (Previously Amended) An isolated nucleic acid molecule encoding an isolated PMSA derived peptide wherein the sequence is selected from the group consisting of SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, and SEQ ID NO:17.

8. (Currently Amended) An expression vector comprising a nucleic acid molecule of claim 6, or 7, or 37 and regulatory sequences suitable for expression of the nucleic acid molecule in a host cell.

9. (Original) A host cell transformed with an expression vector of claim 8.

10-29. Cancelled

30. (Original) An isolated nucleic acid molecule of claim 6, wherein the nucleic acid sequence encodes a conservatively substituted PMSA derived peptide.

31. (Currently Amended) An isolated nucleic acid molecule having identity to SEQ ID NO.:12, SEQ ID NO.:14, SEQ ID NO.:15, SEQ ID NO.:16, and SEQ ID NO.:17 and of claim 7, wherein the nucleic acid sequence encodes a conservatively substituted PMSA derived peptide.

32. Cancelled

33. (Original) An expression vector comprising a nucleic acid molecule of claim 6 and regulatory sequences suitable for expression of the nucleic acid molecule in a host cell.

34. (Original) An expression vector comprising a nucleic acid molecule of claim 7 and regulatory sequences suitable for expression of the nucleic acid molecule in a host cell.

35. (New) An isolated nucleic acid that is complementary to a nucleic acid selected from the group consisting of SEQ ID NO.: 12, SEQ ID NO.: 14, SEQ ID NO.: 15, SEQ ID NO.: 16 and SEQ ID NO.: 17.
36. (New) An isolated nucleic acid that hybridizes under stringent conditions to a nucleic acid selected from the group consisting of SEQ ID NO.: 12, SEQ ID NO.: 14, SEQ ID NO.: 15, SEQ ID NO.: 16 and SEQ ID NO.: 17.
37. (New) An isolated nucleic acid molecule encoding an isolated PMSA derived peptide, the nucleic acid being at least 85% identical to SEQ ID NO.: 13, wherein T can also be U.
38. (New) An isolated nucleic acid molecule encoding a conservatively substituted PMSA derived peptide, the nucleic acid being at least 85% identical to SEQ ID NO.: 13, wherein T can also be U.
39. (New) An expression vector comprising a nucleic acid molecule of claim 37 or 38 and regulatory sequences suitable for expression of the nucleic acid molecule in a host cell.
40. (New) An isolated nucleic acid molecule that is complementary to and has at least 85% identity to SEQ ID NO.: 13.
41. (New) An isolated nucleic acid molecule that hybridizes under stringent conditions to and has at least 85% identity to SEQ ID NO.: 13.